IN THE DRAWINGS:

Attached herewith are two (2) replacement drawing sheets to be substituted for the corresponding drawing sheets currently on file in the above-identified application. The attached replacement drawing sheets include the changes required in reply to the Office Action dated January 2, 2008. More specifically, the changes are as follows:

Figs. 10 and 11, labeled "PRIOR ART."

Attachments: Replacement Sheets

REMARKS

This application has been reviewed in light of the Office Action dated January 2, 2008. Claims 1, 3-7 and 9-23 are present in this application, of which Claims 13-19 have been withdrawn from consideration. Of the claims under consideration, Claims 1 and 7 are in independent form. Claims 2 and 8 have been canceled, without prejudice or disclaimer of subject matter, and will not be mentioned further. Claims 1 and 7 have been amended to define still more clearly what Applicants regard as their invention, and corresponding changes have been made to dependent Claims 3-5 and 10-12. Claims 21-23 have been added. Favorable reconsideration is requested.

Figures 10 and 11 were objected to on the ground that they should be labeled prior art. These figures have been so labeled.

Claims 1, 7, 9 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication 2001/0019130 A1 (Yamazaki et al.). In addition, Claims 3-5 and 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamazaki* in view of U.S. Patent 6,277,679 B1 (Ohtani), and Claim 6, as being unpatentable over *Yamazaki* in view of U.S. Patent 6,020,590 (Aggas et al.).

Independent Claim 1 is directed to a photoelectric converter comprising a plurality of pixels each comprising a sensor element for converting incident light into an electrical signal and a plurality of thin film transistors connected to the sensor element. The thin film transistors have a top gate type structure in which a semiconductor layer, a gate insulating layer, and a gate electrode layer are laminated successively on a substrate, and an electrode of the sensor element connected to the thin film transistor is disposed above the thin film transistor. Also, according to Claim 1, the electrode of the sensor element covers each channel region of the thin film transistors, and the thin film transistors are connected in series with one another and use

the same gate wiring. Support for this structure is present at least in Fig. 3, and in the corresponding portion of the specification.1/

In a conventional photoelectric converter in which an electrode of a sensor element covers each channel regions of a plurality of thin film transistors ("TFT"), there is a considerable adverse effect on the behavior of the TFTs, in particular their OFF characteristics, due to a potential fluctuation of the electrode of the sensor element.

According to the present invention as defined in Claim 1, the thin film transistor is designed as a top gate type, which Applicants have found reduces the adverse effect on the OFF characteristics of the thin film transistors. Applicants have obtained a further improvement by using a serial connection of the plurality of thin film transistors with one another, as is also recited in Claim 1. In addition to that, a greatly-improved image quality has been found to be obtainable by means of adopting the TFT structure described above. Still further improvement can be obtained by adopting the feature recited in Claim 3.

Yamazaki relates to a semiconductor device that has an active matrix substrate including a plurality of pixels arranged in a matrix form and a plurality of sensor portions arranged in a matrix form, together with a backlight. Each sensor portion has a photoelectric conversion element, and the backlight can be used as a light source when an external picture is read. Applicants submit, however, that nothing in *Yamazaki* would teach or suggest a structure of a photoelectric converter in which an electrode of a sensor element covers each channel region of a plurality of thin film transistors, much less such a structure in which in addition the thin film transistors are connected in series with one another. Besides not disclosing or suggesting the claimed structure, *Yamazaki* also does not appear to contain anything that would have helped a

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1/ It is of course to be understood that the claim scope is not limited by the details of this or any other particular embodiment that may be referred to.

person of merely ordinary skill to recognize the adverse effect on the TFT characteristics such as OFF characteristics of the thin film transistor due to the potential fluctuation of the electrode of a sensor element, or to recognize solutions to that problem.

For all these reasons, Applicants submit that claim 1 is allowable over *Yamazaki*.

Ohtani relates to a structure in which a serial connection of TFTs is adopted to reduce OFF current. Applicants submit, however, that nothing in *Ohtani* would suggest recognition of an adverse effect on the TFT characteristics such as OFF characteristics of the thin film transistor due to the potential fluctuation of the electrode of a sensor element: in the case of EL elements, a TFT for controlling current operates to supply a current to a pixel electrode. Accordingly, Applicants submit that there would not in fact have been any reason for a person of merely ordinary skill to attempt to incorporate a series connection into the structure shown in *Yamazaki*, and that Claim 1 is allowable over both documents, taken separately or in any possible combination.

Independent Claim 7 recites features similar to those discussed above with respect to Claim 1, and therefore is also believed to be patentable over for the reasons discussed above.

A review of the other art of record, including *Aggas*, has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims under consideration in this application are each dependent from one or the other of independent Claims 1 and 7, and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of

the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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